ABSTRACT OF THE DISCLOSURE

When a prescribed operation is performed on 1024-bit multiple-precision data in a data-driven processor, the multiple-precision data is treated as a plurality of single-precision data obtained by dividing the multiple-precision data by every 32 bits in accordance with the memory word length of an accumulation memory, and a group of 32 memory words each having 32 bits of the accumulation memory is treated as the multiple-precision data. Accordingly, in the data-driven processor, a usual memory region can serve as an accumulator for multiple-precision data without having to provide any accumulator dedicated to multiple-precision data in the data-driven processor. In addition, since the multiple-precision data is divided into independent single-precision data each having 32 bits, operations for all data can be performed concurrently. Thus, a parallel processing capability of the data-driven processor can be maximized.